7

REMARKS

Claims 1 – 24 are pending in the application.

Claim Rejections – 35 USC § 102 and 103

In this section of the official action, Claims 1 – 10 and 12 – 24 are rejected as being anticipated by Kim, US Patent Number 6,016,474, under 35 USC 102(b). Claim 11 is rejected under 35 USC 103(a) in light of Kim, US Patent Number 6,016,474, in view of Wigodny, US Patent 6,202,199 B1. Favorable reconsideration of these rejections is respectfully requested in light of the above amendments and the following explanations.

As stated in the field of invention section of this application: "The present invention is of a system and method for visualization and debugging of *constraint systems,* and in particular, of a system and method for constraint resolution visualization that helps the user in case the results of the resolution process do not match the expected results".
As described in the background of the invention section of this application, in page 1, line 13: "*Constraint systems* are difficult to debug because they are *declarative* in nature, which means there is *no execution process as for imperative code.* Instead, constraints are evaluated by an algorithm which is obscure to the user".
That is to say, the current invention teaches a visual debugging system and method *for a constraint system which is encapsulated in a declarative language which is, by definition, devoid of an execution process.*

8

Procedural languages, like C and COBOL, are used to describe how to compute a solution using a program. This program is an *imperative* set of commands, usually arranged in a modular functional structure, and implemented as an execution process.

Declarative languages, like Prolog, consist of *fields*, which include data structures and variables, *and of constraints or rules*, which describe the relationships between these fields and determine their values. However, these languages *lack an imperative program to be implemented as an executed process.*

The prior art that the Examiner has cited all relates to debugging tools for *procedural language computer programs*. These programs are imperative procedures written in a procedural language like the C programming language. The programs are *implemented as execution processes.*

Kim at al. US Patent Number 6,016,474, as described in its background of the invention section, relates to a system and method for locating and correcting errors in a *computer program*. More specifically, Kim describes in the summary of the invention section, in column 3, line 31: "A portion of the debugger, herein referred to as the debugger server, preferably executes on same server computer as the *program* which is to debugged", and further describes in column 3, line 42: "The debug server also reads program state information from the computer memory. Using the symbolic information, the debugger server derives the call relationship between the functions contained within the program".

9

That is to say, Kim teaches debugging tools for *computer programs, implemented as*

an execution process.. More specifically, debugging tools for modular functional

computer programs which are written in procedural computer programming

languages, like COBOL or C.

However, Kim does not teach, or even hint at a method or system for debugging a

constraint system, encapsulated in a declarative language, that by definition *lacks an*

imperative program to be implemented as an executed process,

as taught in the present invention.

Wigodny US Patent 6,202,199 B1 introduces a software system which facilitates the

process of *tracing the execution paths of a computer program*: "a new model for

tracing the *execution path of* and debugging a *computer program*"   invention column

4, line 43. Wigodny discloses a debugging system which can trace multiple processes.

Thus, the combination of Kim and Wigodny also fails short of even hinting at a

method or system for debugging a declarative language encapsulated constraint

system, as disclosed in the present invention. Consequently, it is believed that no issue

of obviousness should be raised.

The above comments apply equally to all of the independent claims.It is therefore

submitted that the present independent claims as amended are allowable in light of the

prior art as cited.

The remaining claims are believed to be allowable as being dependent on allowable

main claims.

All of the matters raised by the Examiner have been dealt with and are believed to have been overcome. In view of the foregoing, it is respectfully submitted that all the claims now pending in the application are allowable over the cited reference. An early Notice of Allowance is therefore respectfully requested.

Respectfully submitted,

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